

21



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/731,205

12/06/2000

Tracy E. Thieret

XER 2 0344 D/A0508

8635

7590

03/18/2005

Albert P. Sharpe III

Fay, Sharpe, Fagan, Minnich & McKee, LLP

7th Floor

1100 Superior Avenue

Cleveland, OH 44114

EXAMINER

PHAM, THIERRY L

ART UNIT

PAPER NUMBER

2624

DATE MAILED: 03/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/731,205	Applicant(s) THIERET ET AL.	
	Examiner Thierry L Pham	Art Unit 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 November 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **DETAILED ACTION**

- This action is responsive to the following communication: an Amendment filed on 11/1/04.
- Claims 1-23 are pending in application.

#### ***Response to Arguments***

Applicant's arguments, see pages 8-11, filed on 11/1/04 respect to the rejection(s) of claim(s) 1-12, 26-23 (US 6671066) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12, 16-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorkin et al (U.S. 5898823), and in view of Irie et al (U.S. 6606164).

Regarding claim 1, Sorkin discloses network document system (document network system 70, fig. 8) including:

- a document processing device (network printer 76, fig. 8);
- a document processing device controller (network print server 74, fig. 8); and
- a network interface controller (client computer 72, fig. 8) for communicating job data and control data (job data and control data such as monitoring status of printer, fig. 8, abstract, col. 2, lines 35-42 and col. 4, lines 5-12) to and from a network (network 10, fig. 1), wherein the interface controller is disposed, intermediate the document processing device controller and the network (client computer 72 is disposed between network 10 and print server 74, fig. 8), and in parallel communication with the document processing device and document processing device

Art Unit: 2624

controller (and parallel communicating with network printer 76, bypass print server 74, fig. 2 and fig. 8), for segregating the job data and the control data (separate print data and control data, i.e., job event and print job data, fig. 8, job event is communicated directly with printer and job data is communicated via a print server 74), and wherein the control data is directly communicated between the network interface controller and the document processing device (i.e. job event data is directly communicated between the client computer 72 and network printer 76 bypassing print server 74, col. 4, lines 5-12) which document processing controller (printer sever 74 is disposed between client computer 72 and network printer 76, fig. 8) is disposed between the network interface controller and the document processing device.

Sorkin discloses a print server 74 (document processing device controller) as shown in fig. 8, but fails to teach such print server 74 is for translating the job data communicated from the network interface controller into document processing device data executable by the document processing device.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for translating the job data communicated from the network interface controller into document processing device data executable by the document processing device (print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (●) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.

Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 1.

Regarding claims 2-3, Sorkin further discloses the system as claimed in claim 1 wherein the control data includes any of: diagnostic data, operating software, remote operating instructions (printer's configuration, set-up, printer's status and etc, abstract and col. 4, lines 5-12), performance reports, specification of system states and the associated actions, or requests for information from system elements.

Art Unit: 2624

Regarding claims 4-5, Sorkin further discloses the system as claimed in claim 1 wherein the interface controller identifies object-oriented rendering data within the job data (if the job requires spooling, then the print job is transmitted to the print server 74, and if the not does not require any printing and/or performing any rendering such as color conversion, then the requests is directly communicated with the network printer 76), and parallelly communicates the object-oriented rendering data to the document processing device controller and the document processing device.

Regarding claim 6, Sorkin further discloses the system as claimed in claim 1 wherein the interface controller comprises either a physical (i.e. client computer 72, fig. 8) or logical entity in the system.

Regarding claim 7, Sorkin discloses a business to business communication system (system, fig. 8) for controlling and monitoring a document processing device through network communications, comprising:

- a document processing device (network printer 76, fig. 8) responsive to remote communication signals and capable of issuing device operating status signals (abstract and col. 4, lines 5-12), the communication signals and status signals being received and sent, respectively, via a network system;
- a network interface controller (client computer 72, fig. 8) interposed between the document processing device and the network system for distinguishing the remote communication signals as job data or control data;
- a document processing device controller (network print server 74, fig. 8), disposed intermediate the network interface controller and the document processing device, and;
- wherein the control data (i.e. job event is communicated directly from the client computer 72 to the network printer 76, fig. 8) is communicated to the document processing device directly from the network interface controller.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for translating the job data communicated from the network interface controller into

Art Unit: 2624

document processing device data executable by the document processing device (print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (●) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.

Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 7.

Regarding claims 8-12, and 21, Sorkin further discloses the system as defined in claim 7 wherein the control data includes the device operating status signals (i.e. job event status, fig. 8, abstract and col. 4, lines 5-12) communicated as a regular operational report or in response to an inquiry received by the network interface controller from the network system and many other operating statuses.

Regarding claims 16-18, Sorkins further discloses wherein the control data comprises object-oriented rendering data including text, pictures, graphics for enhancing, and PDL (if the job requires spooling, then the print job is transmitted to the print server 74, and if the not does not require any printing and/or performing any rendering such as color conversion, then the requests is directly communicated with the network printer 76 and it is also known in the art print server 74 also processes rendering intents, please also see Irie for more details regarding print server 120 for converting print data to PDL and performs other type of rendering intents, i.e. color conversion, halftoning and etc).

Regarding claims 19, Sorkin discloses a network document processing system (document system, fig. 8) wherein job data for processing a document is communicated from a job source to a printer through a network, comprising:

- a digital front end (DFE, network print server 74, fig. 8) disposed in communication with the printer for receiving; and

Art Unit: 2624

- an intelligent interface network controller (iNIC, client computer 72, fig. 8) disposed intermediate the network and the DFE, and in parallel communication with the printer and the DFE, for selectively communicating the job data and control data directly to or from the printer (i.e. job event data is directly communicated between the client computer 72 and network printer 76 bypassing print server 74, col. 4, lines 5-12), whereby said selectively communicated job data and control data may bypass flow path communication through the DFE during printer communication with the network

Sorkin discloses a print server 74 (document processing device controller) as shown in fig. 8, but fails to teach such print server 74 is for translating the job data imaging signals recognizable by the printer.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for translating the job data imaging signals recognizable by the printer (print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (●) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.

Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 19.

Regarding claim 20, Sorkin further discloses the document processing system as claimed in claim 19 wherein the job data and the control data enable printer value-added services and management functions (management and monitoring, col. 4, lines 5-12).

Regarding claim 22, Sorkin discloses a method of operating a network-based assembly for document processing (document system, fig. 8) wherein the assembly includes an interface controller (client computer, fig. 8) connected between a document processing device (network printer, fig. 8) and a network system (network 10, fig. 8), and a digital front end (DFE) connected (print server, fig. 8) between the interface controller and for the document processing device, the method comprising steps of:

Art Unit: 2624

- communicating job data and control data to the assembly through the network system (job data and control data such as monitoring status of printer, fig. 8, abstract, col. 2, lines 35-42 and col. 4, lines 5-12);
- determining the appropriate flow of the job data and the control data to the assembly through the interface controller (job data and control data such as monitoring status of printer, fig. 8, abstract, col. 2, lines 35-42 and col. 4, lines 5-12);
- segregating, at the interface controller, the control data from the job data (separate print data and control data, i.e., job event and print job data, fig. 8, job event is communicated directly with printer and job data is communicated via a print server 74);
- communicating the control data directly (i.e. job event data is directly communicated between the client computer 72 and network printer 76 bypassing print server 74, col. 4, lines 5-12) to the document processing device and the job data at least to the DFE;
- directing the document processing signals to the document processing device (i.e. job event data is directly communicated between the client computer 72 and network printer 76 bypassing print server 74, col. 4, lines 5-12); and,
- executing the document processing signals at the document processing device (print document data via network printer, fig. 8), whereby the control data is communicated to and from the document processing device exclusive of a flow path through the DFE.

Sorkin discloses a print server 74 (document processing device controller) as shown in fig. 8, but fails to teach such print server 74 is for converting the job data at the DFE to document processing signals recognizable by the document processing device.

Irie, in the same field of endeavor for network document system, teaches print server 120 of fig. 1 is for is for converting the job data at the DFE to document processing signals recognizable by the document processing device (print server 120 converts print data to an output device format, i.e., printer's format, col. 8, lines 45-52).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin as per teachings of Irie because of a following reason: (•) to provide a direct access to the printer without having to communicate via a print server (abstract and col. 4, lines 48-52) to efficiently monitoring the printer and its status.



Therefore, it would have been obvious to combine Sorkin with Irie to obtain the invention as specified in claim 22.

Regarding claim 23, Sorkin further discloses the method as claimed in claim 22 wherein the executing comprises processing the document in a xerographic environment (network printing environment, fig. 8).

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sorkin and Irie as described in claims 1 & 8 above, and further in view of Suzuki et al (U.S. 5270775).

Regarding claims 13-15, the combinations of Sorkin and Irie do not disclose wherein the control data (command) comprising billing information, accounting information, and service information.

Suzuki, in the same field of endeavor for printings, teaches the control data (command) comprising billing information, accounting information, and service information (col. 1, lines 50-67 and col. 2, lines 1-45).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Sorkin and Irie as per teachings of Suzuki because of a following reason: (1) to allow operators/businesses to obtain usage data of plurality of printers connected via a network for proper billing, accounting, and service information.

Therefore, it would have been obvious to combine Aikawa with Suzuki to obtain the invention as specified in claims 13-15.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. 6452692 to Yacoub, discloses networked printer server for distributing print jobs with plurality of different attributes (color, quality, text, graphics, and etc) to most compatible printers connected via network.

Art Unit: 2624

- U.S. 20030140315 to Blumberg, discloses a print server for processing the rendering intents (print job attributes, parameters, settings, finishing options including color conversion, and etc) selected by the clients.
- US 6219151 to Manglapus et al, discloses a document system of bypassing a print server when acquiring printer's status such as (number of pages printed, paper jam, and etc, col. 5, lines 1-9).

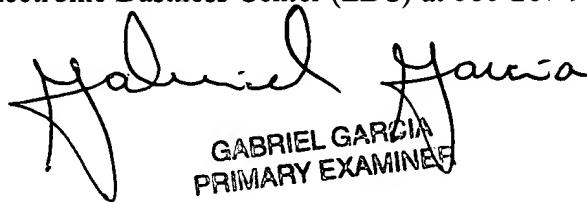
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

TP

  
GABRIEL GARCIA  
PRIMARY EXAMINER